

VERSION WITH MARKING TO SHOW CHANGES MADE

In the Specification

Please replace the paragraph beginning at page 12, line 16 with the following rewritten paragraph:

-With reference to FIGs. 4 and 5, the operation of the end mill grinder 50 will now be explained. The operator independently adjusts the position of each wheel 64 and 66 to accommodate grinding the primary and secondary clearances 24 and 26 of the end mill 20. The operator must independently adjust the position of the wheels for different sizes of end mills. The operator positions the end mill within the end mill retainer 86 by rotating the carriage 82 away from the wheels 64 and 66. The operator then positions one of the flutes 22 on the finger guide 80 [82]. The operator engages the motors, thus rotating the wheels in opposite directions. The operator rotates the carriage about the pivot point 90 back towards the rotating wheels. The end mill then contacts the wheels along the primary clearances and the secondary clearances. For example, wheel 64 grinds the primary clearances of the end mill while the wheel 66 grinds the secondary clearances. Since the end mill is already positioned on the finger guide prior to contacting the wheels, the grinding wheel is prevented from gouging the end mill due to misplacement of the end mill on the finger guide as in existing grinders. The operator, in similar fashion as existing grinders, moves the end mill and its retainer 86 forward along its X axis while simultaneously rotating the end mill, with the finger guide following one of the spiraling flutes. Thus, the end mill's entire length of primary and secondary clearances are ground. In the preferred embodiment of the present invention, the wheels are rotated in opposite directions to avoid unbalanced torque or force being applied to the end mill